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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,274

Applicant(s)

SILVA ET AL.

Examiner

Pedro J. Cuevas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 3-9, 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 10-17 and 20-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of group I (claims 1, 2 and 10-17) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that searching the subject matter of group II and III does not place a serious burden on the examiner, and that issuing one patent on the subject matter of groups I-III would be more expedient for the USPTO, the inventor and the public. This is not found persuasive because a fan slip ring assembly and a retaining member are two different devices that can be used, each alone or combined, in the construction of a rotor for a fan. A method for securing electrical connections is a different invention with a different purpose that can also be used in the assembly process of building a rotor or any other device having electrical connections.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 3-9, 18 and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

### *Drawings*

3. Figures 1-11 and 15-17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the securement caps must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Coil Lead And Coupling Terminal Securement Caps For Securing Wires Of A Rotor.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 10-17 and 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,625,244 to Bradfield in view of U.S. Patent No. 5,254,896 to Bradfield et al.

Bradfield disclose fan and slip ring assembly for an electric machine, comprising:

a rotor (column 2, line 21) for said electric machine, said rotor comprising a rotatable shaft (43) along a longitudinal axis of rotation and a field-generating coil (61) disposed within an interior cavity, said field-generating coil comprising a plurality of turns of electrical wire, said electrical wire further having a coil lead (61A) extending to and being electrically coupled to a lead of a slip ring (53), said coil lead and said lead of said slip ring defining at a point of securement having a pair of coil leads;

first and second pole pieces (73) affixed to said shaft for rotation therewith, and together defining an interior cavity;

a fan (47) having a central aperture through which the shaft passes, the pair of coil leads passing through a pair of openings in said fan; and

a pair of slip rings (55A, 55B) longitudinally spaced from said fan, each slip ring having a coupling terminal (59A, 59B), said slip rings being secured to said shaft, one of said coupling terminals being secured to one of said pair of coil leads of said coil, and the other one of said coupling terminals being secured to the other one of said pair of coil leads.

However, it fails to disclose a pair of securement caps for securing said pair of coil leads and said pair of coupling terminals to said fan.

Bradfield et al. teach a pair of securement caps (Figure 3) for securing said pair of coil leads and said pair of coupling terminals to said fan for the purpose of locking or fixing the twisted wire portions made by the electrical connections between the ends of the field coils and the slip rings to a fan that is formed of thermoplastic material.

It would have been obvious to one skilled in the art at the time the invention was made to use the securement caps disclosed by Bradfield et al. on the fan and slip ring assembly disclosed by Bradfield et al. for the purpose of locking or fixing the twisted wire portions made by the electrical connections between the ends of the field coils and the slip rings to a fan that is formed of thermoplastic material.

9. With regards to claims 10, 11, 27 and 28, it should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. In re Danly, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In Hewlett-Packard Co v Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device is, not what it does." (emphases in original). To emphasize the point further, the court added: "An invention need not operate differently than the prior art to be patentable, but need only be different" (emphases in original). That is, in an apparatus claim, if a prior art structure discloses all of the structural elements in the claim, as well as their relative juxtaposition, then it reads on the claim, regardless of whether or not the function for which the prior art structure was intended is the same as that of the claimed invention.

10. With regards to claims 12-17, 20-24 and 26, Bradfield in view of Bradfield et al. disclose the construction of a fan and slip ring assembly wherein:

the retaining member secures said point of securement to a portion of said fan,  
said portion being the location of the securement of a lead of said original slip ring;

said field-generating coil includes a pair of coil leads extending to and being electrically coupled to a pair of leads of a pair of said slip rings to define a pair of points of securement, said pair of points of securement being secured to said fan by a pair of retaining members;

said pair of securement caps comprise:

a receiving area being configured and dimensioned to cover said pair of coil leads and said pair of coupling terminals when said retaining caps are secured to a surface of said fan;

said pair of retaining caps further comprise:

a pair of end portions depending outwardly from a pair of leg portions, said pair of leg portions being secured to each other at one end, and said pair of leg portions defining said receiving area, said end portions being secured to said surface of said fan;

said pair of end portions each have a heat staking portion;

said pair of securement caps secure said pair of coil leads and said pair of coupling terminals to a portion of said fan, said portion being the location of the securement of a lead of said original slip ring. portions, said pair of leg portions being secured to each other at one end, and said pair of leg portions defining said receiving area, said end portions being secured to said surface of said fan;

said retaining member and fan is constructed out of a polymer; and

said leg portions define a triangular receiving area;

as shown in Figures 2, 3 and 4 of Bradfield, and Figures 2 and 3 of Bradfield et al.

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11. With regards to claim 25, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas  
June 15, 2002

  
JOSEPH WAKS  
PRIMARY EXAMINER